To: Robert Law[rlaw@demaximis.com]
Cc: Willard Potter[otto@demaximis.com]

From: LaPoma, Jennifer
Sent: Tue 2/9/2016 6:30:55 PM
Subject: FW: 17-mile BERA

Rob, I am busy from 1:30-2:30 on Thursday now, but still open the rest of the day.

From: LaPoma, Jennifer

Sent: Tuesday, February 09, 2016 9:54 AM **To:** 'Robert Law' <rlaw@demaximis.com>

Cc: Willard Potter <otto@demaximis.com>; Nace, Charles <Nace.Charles@epa.gov>; William Hyatt <william.hyatt@klgates.com>; Lisa Saban <LisaS@windwardenv.com>; Mike Johns

<MikeJ@windwardenv.com>
Subject: RE: 17-mile BERA

Rob.

Chuck and I have availability on Thursday, February 11th for a follow up discussion on comment 95.

From: Robert Law [mailto:rlaw@demaximis.com]
Sent: Monday, February 08, 2016 10:44 AM

To: LaPoma, Jennifer < LaPoma. Jennifer@epa.gov >

Cc: Willard Potter < otto@demaximis.com >; Nace, Charles < Nace.Charles@epa.gov >; William Hyatt < william.hyatt@klgates.com >; Lisa Saban < LisaS@windwardenv.com >; Mike Johns

< <u>MikeJ@windwardenv.com</u>> **Subject:** RE: 17-mile BERA

Jennifer:

The CPG has reviewed the Region's language associated with its Response on Comment 95 and it remains unclear to the CPG and its consultants on how to proceed on this matter. The CPG requests the opportunity to discuss and clarify the Region's direction on this comment.

Please contact me at your earliest opportunity to schedule a call.
Thank you.
R/
Rob
Robert Law, Ph.D. de maximis, inc. rlaw@demaximis.com Voice: 908-735-9315 Fax: 908-735-2132
>>> "LaPoma, Jennifer" < <u>LaPoma.Jennifer@epa.gov</u> > 2/2/2016 2:35 PM >>>
Rob,
I want to clarify that EPA's comment 95 language (which CPG deleted) was in fact EPA's answer to that discussion.
We will review the provided maps and get back to you on comment 2 and any other items from the revised writeup. We are still on track for getting back to you in mid-February for EPA's follow up action under Benthic Questions.
From: Robert Law [mailto:rlaw@demaximis.com] Sent: Tuesday, February 02, 2016 1:19 PM To: LaPoma, Jennifer < LaPoma.Jennifer@epa.gov > Cc: Willard Potter < otto@demaximis.com >; Vaughn, Stephanie < Vaughn.Stephanie@epa.gov > Mike Barbara < mab.environmental@gmail.com >; William Hyatt < william.hyatt@klgates.com >; Lisa Saban < LisaS@windwardenv.com > Subject: 17-mile BERA
Jennifer:

Comment 2 Follow-up Response - Maps of the biological samples and mudflats are attached.

Comment 98 Follow-up Response - When the CPG calculated the mean, the final result was rounded based on the minimum number of significant figures reported for that dataset pursuant to the Region 2-approved *Data Usability and Data Evaluation Plan for the Lower Passaic River Study Area Risk Assessments*.

For example, the mudflat dataset for chromium includes a concentration of **300 mg/kg** (LRC SSP, 12A-0459-C3AS), which has one verifiable significant figure. This is the least precise value in the dataset, so we applied one significant figure, resulting in a mean of 100 mg/kg. Region 2 applied two significant figures, resulting in a mean of 120 mg/kg.

Similarly, the LPRSA \geq RM 6 dataset for copper includes a concentration of **400 mg/kg** (LRC SSP, 12A-0468-C2AS), which has one verifiable significant figure. This is the least precise value in the dataset, so we applied one significant figure, resulting in a mean of 100 mg/kg. It appears that Region 2 applied two significant figures, resulting in a mean of 130 mg/kg.

The sample concentrations cited above account for all six of the discrepancies noted in comment 98.

The determination of significant figures was based on a script that identifies verifiable significant figures for any concentration. For the chromium example above, the two zeroes following the three (300) were indeterminate, and a conservative significant figure of one was applied. It appears Region 2 assumed two significant figures for this value.

It should be clarified that only basic statistics such as means were calculated using the initial, conservative assessment of significant figures. When calculating EPCs for the risk assessment, further evaluation of the precision of these concentrations resulted in UCLs rounded to at least two significant figures.

Comment 95 - The CPG is awaiting feedback from Region 2 on Response to Comment 95.

Attached are the CPG's revisions and clarifications to the Region's 1/13/16 call notes.

Please contact me with any questions and comments.

Thank you.

R/

Rob

Robert Law, Ph.D. de maximis, inc. rlaw@demaximis.com Voice: 908-735-9315

Fax: 908-735-2132